

REMARKS

This paper is responsive to the Office Action dated June 1, 2007. The independent claims (1, 7, 13, and 16) have been amended to reduce issues for appeal.

In particular, the independent claims (1, 7, 13, and 16) have been amended by eliminating the limitation directed to a discontinuous second coating and adding the limitation that the first reflective coating has at least 50 vol % of an inorganic binder. Support for this amendment is found, at least, at paragraph [0027] of the published application US 2005/0074580. Claims 2, 3, 8, 9, 15, 17, and 18 have been canceled as a result of this amendment.

New claims 29-35 have been added to read on issued claims 8, 10, 12, 23, 25, and 27 of US 7,241,500 issued July 10, 2007. Support for these claims is found, at least, at paragraphs [0013], [0026], [0033], [0048] – [0050] and Table 2 and 3 of the published application US 2005/0074580 and in originally filed Claim 1. To the extent such claims are patentable, Applicants believe they are the first inventors of the claimed subject matter. Thus, no new matter has been entered as a result of this amendment.

Claims 1, 4, 7, 10, 13, 16, 19, and 23-35 are pending.

Interview Summary

Applicants thank the Examiner for conducting a Telephone Interview with Applicants representatives, Colene Blank and Brian Whipps on August 27, 2007. The cited references were discussed and the Examiner suggested that Applicants provides a showing that the references did not meet the claimed limitations or a showing of unexpected results. Applicants took the Examiner's suggestions under advisement. Applicants also suggested that the prior filed 131 declaration overcomes the rejection based on the Shiao et al., reference. The Examiner indicated that he would review this issue.

Provisional Double Patenting Rejection

Claims 1-4, 7-10, 15-19, 23-28 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13, 15-27, 29-41 and 43-46 of copending Application Serial No. 10/746,829 in view of Meyer et al., (US 4,092,441) or Jacobs (US 6,569,520). To date, the undersigned has not received a Notice of Allowance for application having Application Serial No. 10/746,829. Therefore, a further response to this provisional rejection is not necessary at this time.

§ 103 Rejection (Sloan/Sliwinski)

Claims 1-4, 7-10, 15-19, and 22-28 stand rejected under 35 USC § 103(a) as being unpatentable over U.S. Patent Number 3,479,201 to Sloan ("Sloan") in view of U.S. Patent Number 6,454,848 to Sliwinski et al., ("Sliwinski"). Applicants disagree.

Prima Facie Obviousness Rebuttal Evidence

If the prima facie obviousness rejection is maintained in view of the above amendments, Applicants assert that the enclosed 37 CFR §1.132 Declaration by Dr. Christopher L. Gross rebuts the prima facie obviousness rejection by showing unexpected results when comparing the claimed invention with the closest prior art which is commensurate in scope with the claims.

The enclosed 37 CFR §1.132 Declaration by Dr. Christopher L. Gross provides objective evidence that the claimed invention possesses unexpectedly improved direct solar reflectance over the closest prior art which is commensurate in scope with the claims.

The comparative commercially available green colored roofing granule sample had a calculated direct solar reflectance value of 8.5%. The comparative green colored roofing granule sample, having a single IR reflective coating, had a calculated direct solar reflectance value of 15%. The inventive green colored roofing granule sample had a calculated direct solar reflectance value of 29%.

The prior art described in the Sloan reference was not tested as no color other than white was described or exemplified in Sloan. The claimed invention is directed to a non-white roofing granule. All the roofing granules tested were colored green.

As stated in the enclosed 37 CFR §1.132 Declaration by Dr. Christopher L. Gross, it is unexpected that the addition of an undercoat would increase the amount of solar reflectance by nearly 100%.

Thus, any alleged prima facie obviousness rejection is rebutted based on the enclosed 37 CFR §1.132 Declaration by Dr. Christopher L. Gross. Applicants respectfully request withdrawal of the obviousness rejection of the pending claims based on Sloan in view of Sliwinski.

§ 103 Rejection (Shiao)

Claims 1-4, 7-10, 15-19, and 23-28 stand rejected under 35 USC § 103(a) as being unpatentable over Shiao et al., US 7,241,500 ("Shiao"). Applicants disagree.

The prior pending independent claims 1, 7, 13, and 16 have been amended by adding the limitation that the first reflective coating has at least 50 vol % of an inorganic binder. None of the claims issued in Shiao read on the prior pending independent claims 1, 7, 13, and 16.

Applicants have previously provided a Rule 131 Declaration to antedate Shiao. Applicants assert that the Rule 131 Declaration provides sufficient evidence that the subject matter of the rejected claims were possessed by the Applicants prior to the date of Shiao. The rejected claims are patentably distinct from the issued claims being of Shiao. Reconsideration and withdrawal of the rejections is respectfully requested.

Accordingly, Applicants respectfully request favorable reconsideration of these rejections.

CONCLUSION

In view of the above, Applicants submits that the pending claims are in condition for allowance. Reconsideration is respectfully requested and a Notice of Allowance is earnestly solicited.

It is believed that no additional fee is due; however, in the event a fee is required, please charge the fee to Deposit Account No. 13-3723.

Respectfully submitted,

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